REMARKS

Applicants respectfully request favorable reconsideration of this application, as amended.

Applicants note with appreciation the indication of allowable subject matter with respect to Claims 2, 4–6 and 7–12.

Figure 1 was objected to as lacking a label designating the contents of the figure as "Prior Art."[1] In response, a corrected version of Figure 1 has been submitted herewith. The drawings were generally objected to under 37 C.F.R. § 1.83(a) as lacking "the absolute value of the input signal," an element recited by Claims 7, 10 and 12. Applicants respectfully traverse, and direct the Examiner's attention to Figure 4, which depicts "$|x(t)|$" within selecting unit 215 as well as "$|x_1|$, $|x_2|$, ..., etc." within the "LOOK-UP TABLE"; Figure 5, which recites "absolute value of input signal $x(t)$"; Figure 6, which depicts "$|x(t)|$" within predistortion unit 101 as well as "$|x_1|$, $|x_2|$, ..., etc." within the "LOOK-UP TABLE." Accordingly, Applicants request that the Examiner reconsider and withdraw the drawing objection with respect to "the absolute value of the input signal."

The Specification was objected to due to the mislabeling of look-up table 114 within the first full paragraph on Page 6, i.e., lines 11–24. In response, the Specification has been corrected.

Claims 7–12 were allowed, while Claims 2 and 4–6 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Claims 1 and 3 were rejected under 35 U.S.C. § 102(b) as being anticipated by Budnik et al. (USP 5,745,006). Applicants respectfully traverse.

Figure 1 is directed to a digital feedback linearizing apparatus and recites, in pertinent part, "a power amplifier input/output signal subtracting means, which generates a difference between an input signal [$u(t)$] and an output signal [$y(t)$] of the power amplifier," "an inverse distorted feedback signal extracting means, which extracts an inverse distorted feedback signal ($e(t)$) corresponding to an input signal ($x(t)$) ... based on the output signal of the power amplifier input/output signal subtracting means and the input signal ($x(t)$)," and "a signal

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[1] *See*, MPEP § 608.02(g).

adding means, which generates a predistorted signal (u(t)) input to the power amplifier by adding the inverse distorted feedback signal (e(t)) to the input signal (x(t))." Applicants respectfully submit that none of the cited references, taken either singly or in combination, teaches or suggests these features.

Budnik discloses a distortion compensation method for a power amplifier that predistorts an input signal 13, using predistortion element 22, and then adds the predistorted input signal to an error signal 42 using summer 24. *See*, e.g., FIG. 2; Col. 2, line 8 to Col. 4, line 5. Applicants submit that Budnik fails to disclose a power amplifier input/output signal subtracting means which generates a difference between an output signal of a power amplifier and a predistorted input signal u(t) to the power amplifier, as recited by Claim 1. Instead, Budnik teaches that summer 36 generates error signal 42, which is the difference between a downmixed output signal of a power amplifier and a delayed version of the input signal (i.e., delayed input signal 34). Simply put, Budnik's delayed input signal 34 is not a predistorted input signal u(t) to a power amplifier that is generated by adding an inverse distorted feedback signal e(t) to an input signal x(t), as recited by Claim 1.

Furthermore, Budnik fails to teach or suggest that the output of summer 24 may replace delayed input signal 34 as an input to summer 36. Moreover, Budnik fails to disclose the claimed "inverse distorted feedback signal extracting means," which extracts the inverse distorted feedback signal e(t) based on an output signal of the power amplifier input/output signal subtracting means and an input signal x(t). Consequently, Applicants submit that Budnik fails to teach or suggest all of the features recited by Claim 1.

Accordingly, Claim 1 is allowable over the cited reference. Claim 3, depending from Claim 1, is also allowable, at least for the reasons discussed above.

Applicants respectfully request that this application now be passed to issue, and a Notice of Allowance is respectfully solicited.

If any extension of time is required in connection with the filing of this paper and has not been requested separately, such extension is hereby requested.

The Commissioner is hereby authorized to charge any fees and to credit any overpayments that may be required by this paper under 37 C.F.R. §§ 1.16 and 1.17 to Deposit Account No. 02-2135.
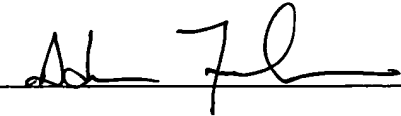
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Respectfully submitted,

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December 14, 2005   By: _____

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1751-356 Response

<u>AMENDMENTS TO THE DRAWINGS</u>

Please replace FIG. 1 with corrected FIG. 1 provided on the Replacement Sheet attached hereto.
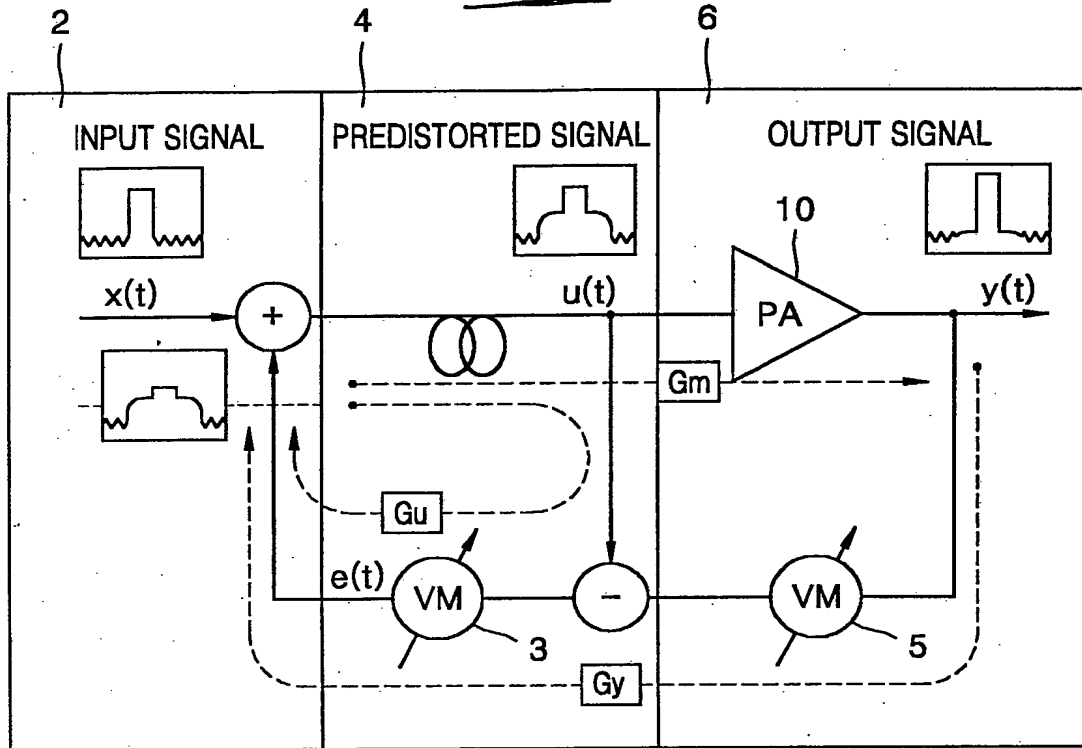
Annotated Page

FIG. 1

Prior Art

FIG. 2